

REMARKS

Claims 1, 3-5, 7-9, and 11-22 are pending. Among them, claims 1 and 11 are currently being examined. Note that claim 3, contrary to the Examiner's assertion, has never been withdrawn from consideration, and its examination is required. See the Request for Continued Examination filed on January 10, 2002. Claims 1 and 11 are rejected under 35 U.S.C. § 102(b). Applicants traverse the Examiner's grounds for rejection as follows.

U.S. Patent No. 4,795,742

The claims are rejected as being anticipated by U.S. Patent No. 4,795,742 ("the '742 patent"). Claim 1, the only independent claim, will be first discussed.

Claim 1 covers an American ginseng extract that is obtained by extraction, centrifugation, and filtration with an ultrafiltration membrane with a molecular weight cut off of at least 1,000. Thus, each component in the extract has a molecular weight of at least 1,000.

According to the Examiner, "[the] '742 patent does not specifically teach that an ultrafiltration membrane with a molecular weight cut-off of 1,000; however, the ginsenosides extracted have a molecular weight greater than 1,000 (see structural formula in column 3). Therefore, the composition extracted by US '742 appears to be the same as the claimed composition" (the Office Action, page 3, lines 11-15). Applicants disagree.

As the Examiner correctly points out, the '742 patent does not teach filtration, as recited in claim 1, with an ultrafiltration membrane with a molecular weight cut off of at least 1,000. Nevertheless, not each of the ginsenosides extracted in the '742 patent has a molecular weight greater than 1,000, as required by claim 1. As shown in column 3 of the '742 patent, an extract from ginseng powder contains ginsenosides that have substituent R₁ (i.e., a first non-glucose sugar or glucose), substituent R₂ (i.e., a second non-glucose sugar or hydrogen), and substituent R₃ (i.e., a third non-glucose sugar or hydrogen). When R₁ is the first sugar (MW=370) and each of R₂ and R₃ is hydrogen, the molecular weight of the ginsenoside is only 788. Similarly, when R₁ is glucose (MW=180), each of R₂ and R₃ is hydrogen, the molecular weight of the ginsenoside is 598; when R₁ is glucose, R₂ is the second sugar (MW=370), and R₃ is hydrogen, the molecular weight of the ginsenoside is 967; and when R₁ is glucose, R₂ is hydrogen, and R₃ is the third sugar (MW=294), the molecular weight of the ginsenoside is 891. Therefore,

contrary to the Examiner's assertion, not all ginsenosides extracted in the '742 patent have a molecular weight greater than 1,000. In other words, the extract disclosed in the '742 patent contains components having molecular weights less than 1,000, and is different from the extract of claim 1. Thus, claim 1 is not anticipated by the '742 patent. Neither are claims 3 and 11, which depend from claim 1.

JP 04316507A

The claims are rejected as being anticipated by JP 04316507A ("JP '507"). More specifically, the Examiner asserts that "JP '507 teaches extracting American ginseng with water and methanol and then using ultrafiltration to exclude components with a molecular weight of less than 1,000 ... the composition of JP '507 appears to be the same as the claimed composition" (emphasis added, the Office Action, page 3, line 21 to page 4, line 3).

The Examiner misread JP '507. This reference discloses an extract, in which each component has molecular weights of at least 10,000, not 1,000. In contrast, in the extract of claim 1, each component has a molecular weight of at least 1,000.

As stated in the Specification, the extract of claim 1 contains "substances with molecular weight less than 3,000 [and greater than 1,000]" (page 7, lines 16-17). In other words, the extract of claim 1 contains components that have molecular weights between 1,000 and 10,000. Such components are not present in the extract disclosed in JP '507. As a result, the extract of claim 1 is different from that in JP '507. Therefore, claim 1 is not anticipated by JP '507. Neither are claims 3 and 11, which depend from claim 1.

JP 61109732A

The claims are rejected as being anticipated by JP 61109732A ("JP '732"). More specifically, the Examiner asserts that "JP '732 teaches extracting American ginseng with a water soluble solvent or water and then filtering the extract to obtain a component with a molecular weight of 1,000 ... the composition of JP '732 appears to be the same as the claimed composition" (emphasis added, the Office Action, page 4, lines 6-10).

JP '732 discloses an extract, in which the components have molecular weights of preferably greater than 10,000, not 1,000. As discussed above, the extract of claim 1, unlike the

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extract in JP '732, contains components having molecular weights between 1,000 and 10,000. Therefore, the extract of claim 1 is different from that in JP '732. As a result, claim 1 is not anticipated by JP '732. Neither are claims 3 and 11.

Other claims

In response to the restriction requirement dated November 17, 2000, Applicants elected Group I, i.e., claims 1-11, for prosecution. However, only claims 1, 3, and 11 are being examined currently. Applicants request examination of claims 4-5 and 7-9 after claims 1, 3, and 11 have been allowed.

CONCLUSION

For the reasons above, Applicants submit that the anticipation rejection is believed to have been overcome, and the claims are now in condition for allowance.

Applicants filed a Petition for an Extension of Time on May 6, 2002 to extend the period for response to the office action dated January 24, 2002, for one month to and including May 24, 2002. Enclosed is a copy of the Petition for Extension of Time. Please apply any other charges to Deposit Account No. 06-1050.

Respectfully submitted,

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